

# **REGULATORY APPROACH TO WETLAND JURISDICTION: AN ANALYSIS OF LA. COASTAL RESOURCES PROGRAM AND CWA (CLEAN WATER ACT) SECTION 404 METHODOLOGIES**

## **PURPOSE**

The need to distinguish regulatory jurisdiction for coastal wetlands is important to individuals, corporations, and government agencies in order to avoid and minimize impacts to ecological resources and expedite permit processing. The understanding of the similarities and differences will improve coordination between the regulatory agencies and provide greater protection of valuable coastal resources.

## **OBJECTIVES**

- Dissemination of information regarding “wetlands” definitions
- Clearer understanding of wetland regulatory authority
- Interpreting the boundary of wetland jurisdiction

## **CURRENT ROLE OF LEGISLATIVE GUIDANCE**

### **Clean Water Act (CWA) Section 404**

The methodology for identifying and delineating wetlands that may be subject to regulatory jurisdiction under Sec. 404 of the Clean Water Act is found in the Corps of Engineers Wetland Delineation Manual. It is a part of “jurisdictional determination” used in implementing Sec. 404 of the CWA and Sec. 10 of the Rivers and Harbors Act (RHA) of 1899. It also provides data for the computation of resource protection measures, impacts, compensatory mitigation, and enforcement of unauthorized activity. A Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain was implemented in 2008 to address regional wetland characteristics and improve accuracy and efficiency of wetland delineation procedures.

## **Louisiana Coastal Resources Program**

The LCRP was developed under the Louisiana State and Local Resources Management Act of 1978. It is a decision making guideline to protect, develop, and where feasible, restore the natural resources of the state while providing adequate economic growth and development. The guidelines are a set of performance standards to evaluate impacts of proposed actions on coastal resources. The definitions in Subchapter A. Sec. 700 Definitions, along with Subchapter B. Coastal Use Guidelines, Sec. 701G General listing of impacts appropriate to avoid or minimize and Subchapter C. Coastal Use Permits and Mitigation, Sec. 724 Rules and Procedures for Mitigation provide criteria for coastal wetland jurisdiction.

## **WETLAND ANALYSIS AND INTERPRETATION**

### **Clean Water Act (CWA) Section 404**

According to the Corps Manual, identification of wetlands is based on a three parameters approach involving indicators of hydrophytic vegetation, hydric soils, and wetland hydrology. These parameters can be used not only to identify wetlands but also delineate its boundary. Besides the use in regulatory programs, wetland identification can be used for resource inventories and management plans. A key feature in identifying wetlands defined jointly by the Corps of Engineers and the Environmental Protection Agency as “waters of the United States” that are under normal circumstances, wetlands support “a prevalence of vegetation typically adapted for life in saturated soil conditions.” Many waters of the United States are unvegetated (tidal flats, shorelines, etc.) and thus excluded from the Corps/EPA definition. Delineated wetlands (vegetated) become a subset of “waters of U.S.”- navigable and non-vegetated waters covered under the Rivers and Harbors Act of 1899 (RHA) and CWA.

The accuracy and quality of a delineation is directly dependent upon the education and experience of the delineator. A background in wetland ecology and familiarity with a specific region in which the work is performed leads to rational and reliable professional judgment.

## **Louisiana Coastal Resources Program**

Jurisdiction in the coastal zone is initiated by the activity or “use” as addressed in the LCRP guidelines. All applicable uses below the 5 foot contour line (as identified by USGS 1:24000 topographic maps or individual surveys) are subject to LCRP jurisdiction.\*

The definition of wetlands as described in Subchapter C. Sec. 724 “open water area or areas that or inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions, but specifically excluding fastlands and lands more than 5 feet above sea level which occur in the designated coastal zone of the state.”

Fastlands by definition are lands that have been impounded, pumped, and drained either before January 1, 1979 or were lawfully (permitted) after and preventing direct and significant impacts to coastal waters. Wetland jurisdiction in the LCRP is thus driven by habitat (marsh, bottomland hardwoods, swamps, bays, lakes, etc.) and their functions (natural biologically valuable areas, protective coastal features; Sec. 701 G. 5.) Non-jurisdictional areas (uplands, fastlands) have been described by definition. When hydrological modification (natural occurring droughts and man-made drainage improvements) has occurred affecting coastal wetlands, the habitat’s ability to provide wetland functions are sometimes reduced or eliminated. This presents a question of when does a wetland habitat cease to function as a wetland? Interpreting these modifications require best professional judgment in many cases. The DNR staff will extend jurisdiction to these sites that exhibit a majority of the vegetation type defined to be a coastal wetland habitat. Lost or reduced functions are captured in permit recommendations and mitigation value assessment.

In summation, if the habitat is comprised of coastal wetland vegetation, it is a wetland under the LCRP definition and will require mitigation of adverse impacts. However, even if it is a wetland habitat, if the project is exempt from permitting (within a validly existing “fastland”, 5 feet in elevation, or within the footprint of a residential structure) no mitigation will be required.

*\* Exceptions include ongoing agricultural, forestry and aquaculture activities which do not require a permit from the USACOE and meet requirements for such exemptions; construction of “single family” camp or residence and appurtenances*

## CONCLUSIONS

Essentially Sec. 404 of the CWA and Sec. 10 of the RHA are different from the LCRP in both analysis and interpretation of coastal wetlands. More often than not in coastal marsh habitats where elevations do not reach or exceed 5 ft. except for natural ridges and man-made spoil deposits, jurisdictional delineations coincide. It is the upper estuarine basins, predominantly bottomland hardwoods, that delineation jurisdiction lines diverge between state and federal programs. Here the 5 ft. contour will most often appropriately delineate the LCRP jurisdiction boundary. The Sec. 404 boundary will be interpreted by either a three parameter field analysis or “in house” determination. This is the federal regulatory program. Interpretation of impacts to habitat below the 5 ft. contour is performed by LCRP field scientist to recommend avoidance and minimization if necessary and quantify parameters for wetland value assessment if the project is accepted with some form of habitat impact. This is the state regulatory program

## FUTURE DIRECTIONS

### **Initial Determinations**

An understanding of the wetland regulatory jurisdiction differences is essential to both applicants and regulatory authorities at federal, state and local government levels. Misunderstanding can be avoided by informing applicants early in the processing stage where jurisdictional boundaries exist. The New Orleans District of the Army Corps of Engineers has taken steps to include the possible need of authorization by the Louisiana Coastal Resources Program in their official “letter of determination” sent in response to wetland inquiries by property owners. Permit analysts at DNR, upon receiving a completed application with accurately detailed plats, can determine if a project site is located inside of state coastal jurisdiction. Through the use of GIS, elevations and habitat data are used to provide an applicant with an estimation of acreage of impacts for activities within the LCRP boundary. Field staff, at the request of the permit analyst, will provide verification for actual “real time” status of the proposed site. An applicant will then have an estimation of impact acreage to weigh mitigation cost based on

habitat type affected. These mitigation cost are now utilized in deciding to reduce impacts to cut project cost or proceed as proposed after wetland avoidance and impact minimization have been addressed.

### **Compensatory Mitigation**

In order to derive the final compensatory mitigation figure presented to an applicant, a habitat community model is utilized to quantify the suitability of an area to support a diversity of fish and wildlife species. At present three models; swamp, bottomland hardwood and marsh; have been developed. A list of variables which characterize each habitat in the coastal zone are formulated from measured parameters in the field. Each variable is represented by a suitability index which is then plugged into an equation to arrive at an overall habitat suitability index. These are expressed in average annual habitat units. The loss of the resource value as measured in these units is to be compensated through mitigation.

### **WVA Field Parameters**

Agency field staffs are requested by permit analysts to proceed in obtaining habitat parameters to calculate compensatory mitigation for impacts associated with permitted activities. Techniques used in obtaining the parameter measurements have been standardized since 1995 when mitigation regulations were adopted in the coastal zone. These include plot size (0.1 acre), dbh measure, water regime and vegetative characterization, and dominant/codominant canopy assessment. Consistency is maintained by employing multiple field personnel in recording WVA parameters on projects impacting large acreage and linear facilities which require excessive plot sampling. This methodology allows for interaction of scientific staff to arrive at objective measurements with reduced bias and a seamless interpretation of habitat functions across the coastal regions.